

WHAT IS CLAIMED IS:

1. A time code generator comprising:

means for dividing a frame number indicated by time address data in supplied code word data by 2 so as to obtain a quotient and a remainder; and

5 means for replacing said frame number indicated by said time address data in said code word data with a value of said quotient and for generating a time code based on the code word data in which a value of a color frame flag is set to 0 if a value of said remainder is 0, and for replacing said frame number indicated by said time address data in said code word data with said value of said quotient and for  
10 generating a time code based on the code word data in which said value of said color frame flag is set to 1 if said value of said remainder is 1.

2. The time code generator according to claim 1, further comprising means for performing drop frame correction by dropping frames of frame numbers 00, 01,  
15 02 and 03 at every minute, except every tenth minute (00, 10, 20, 30, 40, 50).

3. A time code generating method, comprising the steps of:

dividing a frame number indicated by time address data in supplied code word data by 2 so as to obtain a quotient and a remainder; and

20 replacing said frame number indicated by said time address data in said code word data with a value of said quotient and generating a time code based on the code word data in which a value of a color frame flag is set to 0 if a value of said remainder is 0, and replacing said frame number indicated by said time address data in said code word data with said value of said quotient and generating a time code  
25 based on the code word data in which said value of said color frame flag is set to 1 if said value of said remainder is 1.

4. The time code generating method according to claim 3, further comprising a step of performing drop frame correction by dropping frames of frame  
30 numbers 00, 01, 02 and 03 at every minute, except every tenth minute (00, 10, 20, 30, 40, 50).

5. A time code reader comprising:

means for reading a time code;

5 means for multiplying a frame number indicated by time address data in said time code by 2 to obtain a product; and

means for replacing said frame number indicated by said time address data in said time code with a value obtained by adding 1 to said product if a value of a color frame flag in said time code is 1, and for replacing said frame number indicated by said time address data in said time code with said value of said product if said  
10 value of said color frame flag in said time code is 0.

6. A time code reading method comprising the steps of:

reading a time code;

15 multiplying a frame number indicated by time address data in said time code by 2 to obtain a product; and

replacing said frame number indicated by said time address data in said time code with a value obtained by adding 1 to said product if a value of a color frame flag in said time code is 1, and replacing said frame number indicated by said time address data in said time code with said value of said product if said value of said  
20 color frame flag in said time code is 0.

7. A video recording and reproducing apparatus comprising:

means for dividing a frame number indicated by time address data in supplied code word data by 2 so as to obtain a quotient and a remainder;

25 means for replacing said frame number indicated by said time address data in said code word data with a value of said quotient and for generating a time code based on the code word data in which a value of a color frame flag is set to 0 if a value of said remainder is 0, and for replacing said frame number indicated by said time address data in said code word data with said value of said quotient and for  
30 generating a time code based on the code word data in which said value of said color frame flag is set to 1 if said value of said remainder is 1;

means for recording supplied video data with said generated time code onto a recording medium;

means for reproducing data from said recording medium;

means for reading the time code from said reproduced data;

5 means for multiplying a frame number indicated by time address data in said readout time code by 2 to obtain a product; and

replacing said frame number indicated by said time address data in said time code with a value obtained by adding 1 to said product if a value of a color frame flag in said readout time code is 1, and for replacing said frame number indicated by  
10 said time address data in said readout time code with said value of product if said value of said color frame flag in said readout time code is 0.

8. The video recording and reproducing apparatus according to claim 7, further comprising means for performing drop frame correction by dropping frames  
15 of frame numbers 00, 01, 02 and 03 at every minute, except every tenth minute (00, 10, 20, 30, 40, 50).